FIG.1

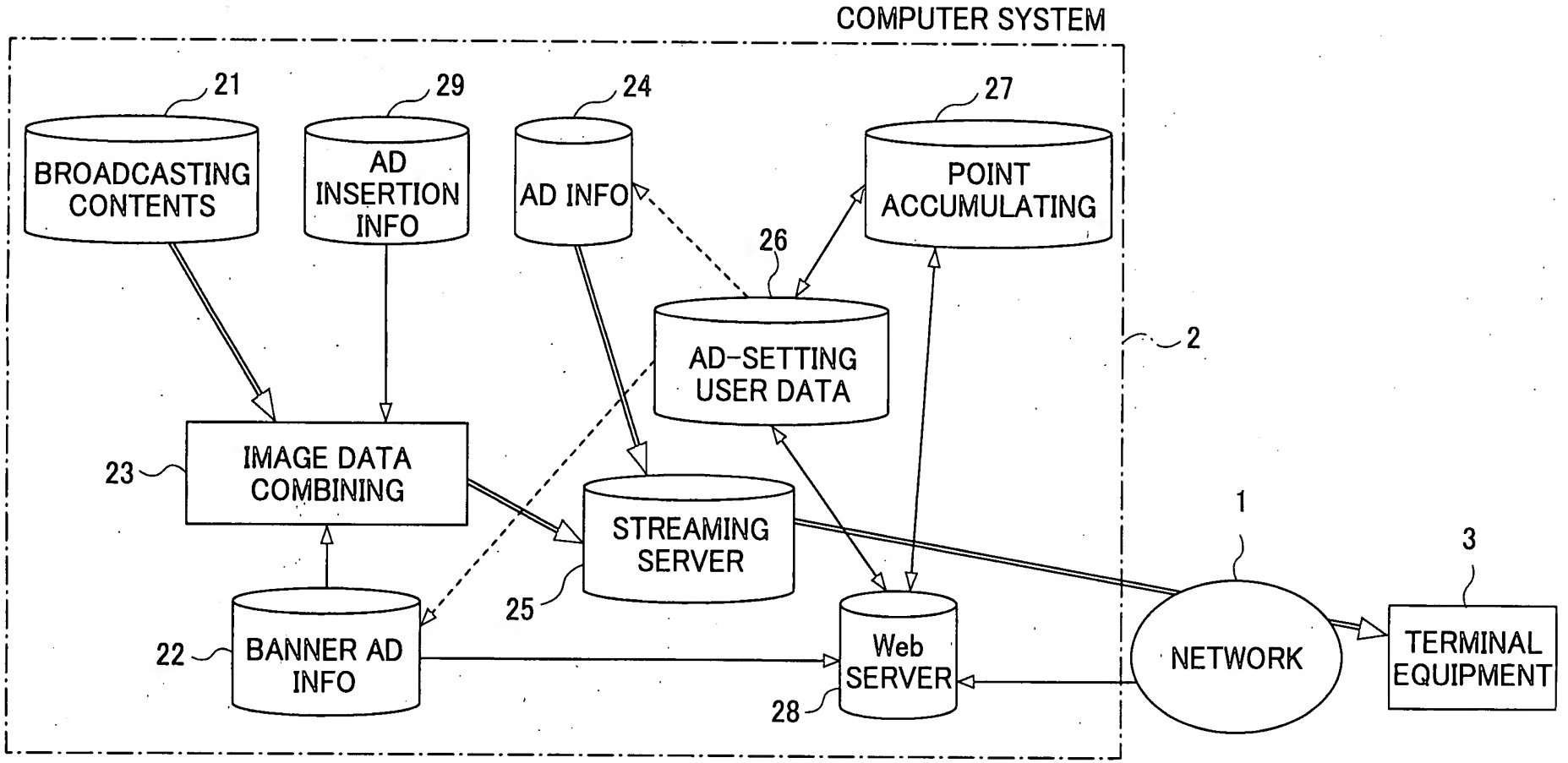

COMPUTER SYSTEM
21
BROADCASTING CONTENTS
29
AD INSERTION INFO
24
AD INFO
27
POINT ACCUMULATING
26
AD-SETTING USER DATA
2
23
IMAGE DATA COMBINING
STREAMING SERVER
25
1
3
22
BANNER AD INFO
Web SERVER
28
NETWORK
TERMINAL EQUIPMENT

FIG.2

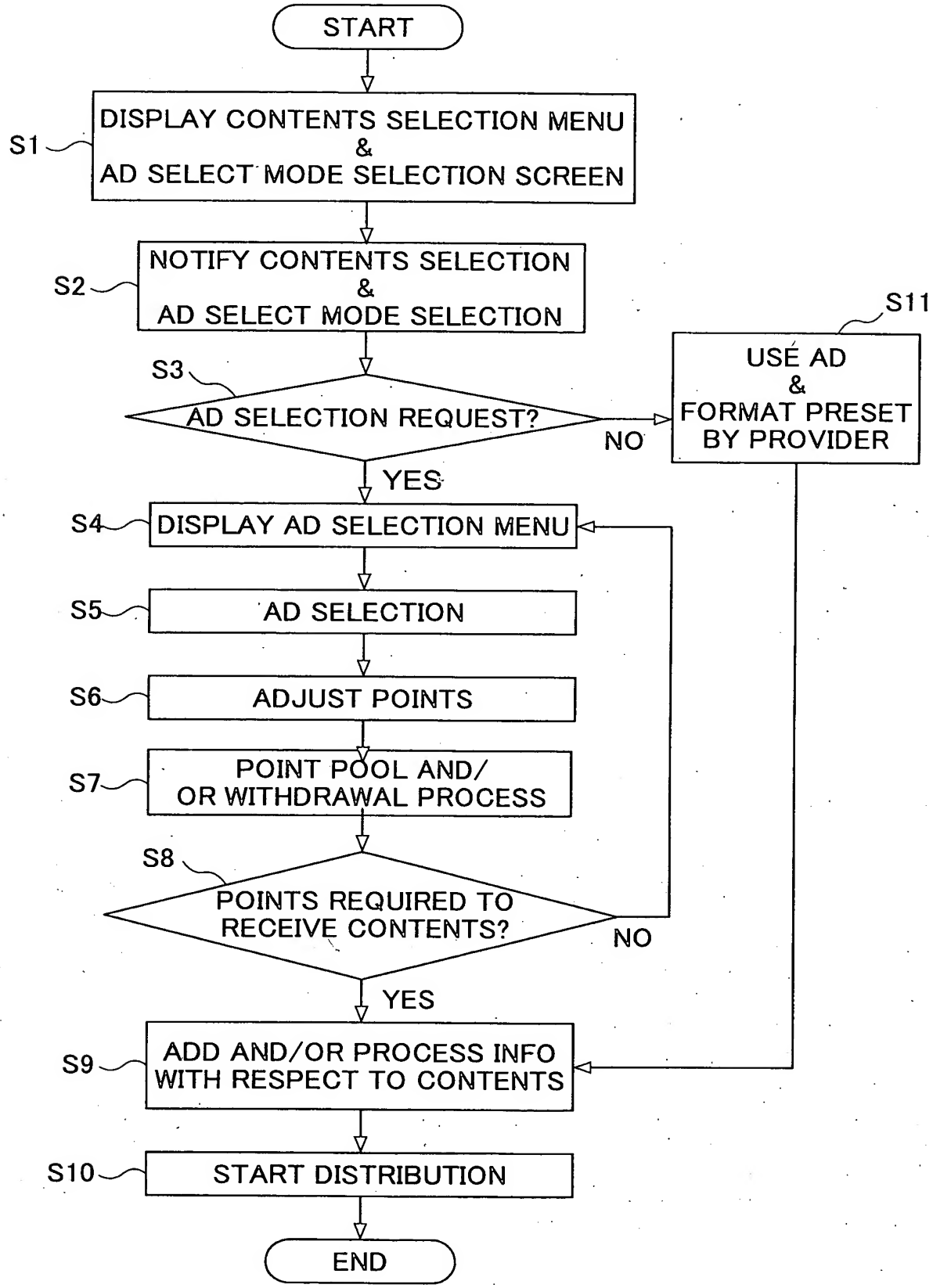

START
DISPLAY CONTENTS SELECTION MENU & AD SELECT MODE SELECTION SCREEN
S1
NOTIFY CONTENTS SELECTION & AD SELECT MODE SELECTION
S2
S3
AD SELECTION REQUEST?
NO
S11
USE AD & FORMAT PRESET BY PROVIDER
YES
S4
DISPLAY AD SELECTION MENU
S5
AD SELECTION
S6
ADJUST POINTS
S7
POINT POOL AND/ OR WITHDRAWAL PROCESS
S8
POINTS REQUIRED TO RECEIVE CONTENTS?
NO
YES
S9
ADD AND/OR PROCESS INFO WITH RESPECT TO CONTENTS
S10
START DISTRIBUTION
END

FIG.3

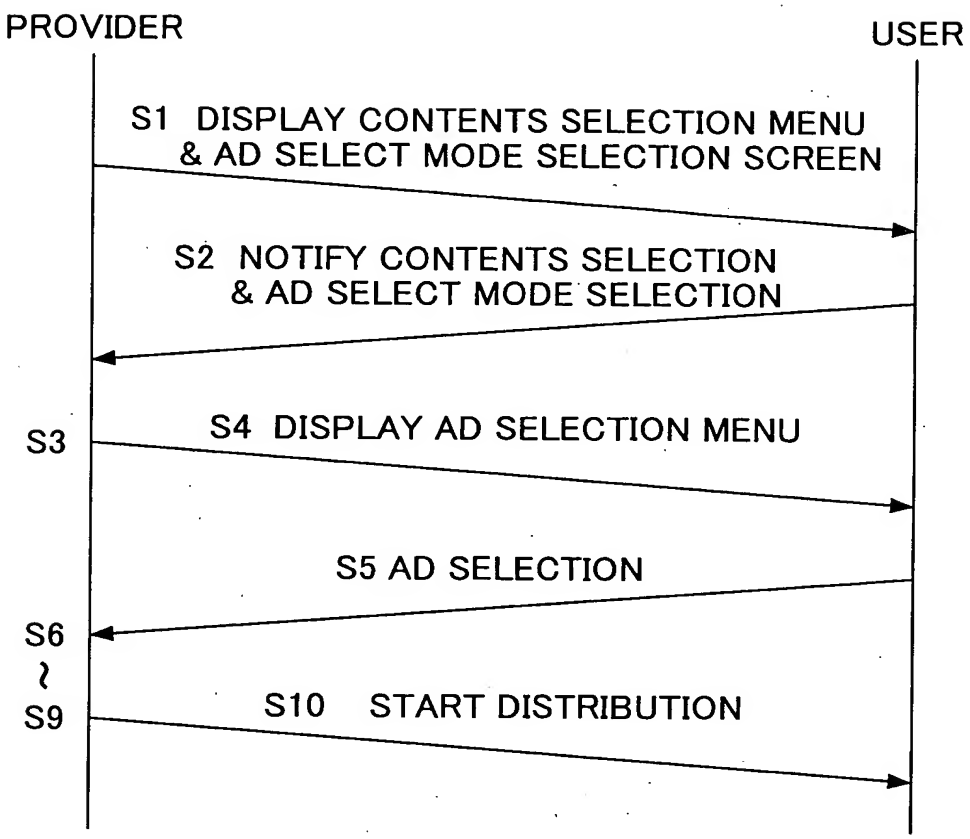

PROVIDER
USER
S1 DISPLAY CONTENTS SELECTION MENU & AD SELECT MODE SELECTION SCREEN
S2 NOTIFY CONTENTS SELECTION & AD SELECT MODE SELECTION
S3
S4 DISPLAY AD SELECTION MENU
S5 AD SELECTION
S6
~
S9
S10 START DISTRIBUTION

FIG.4

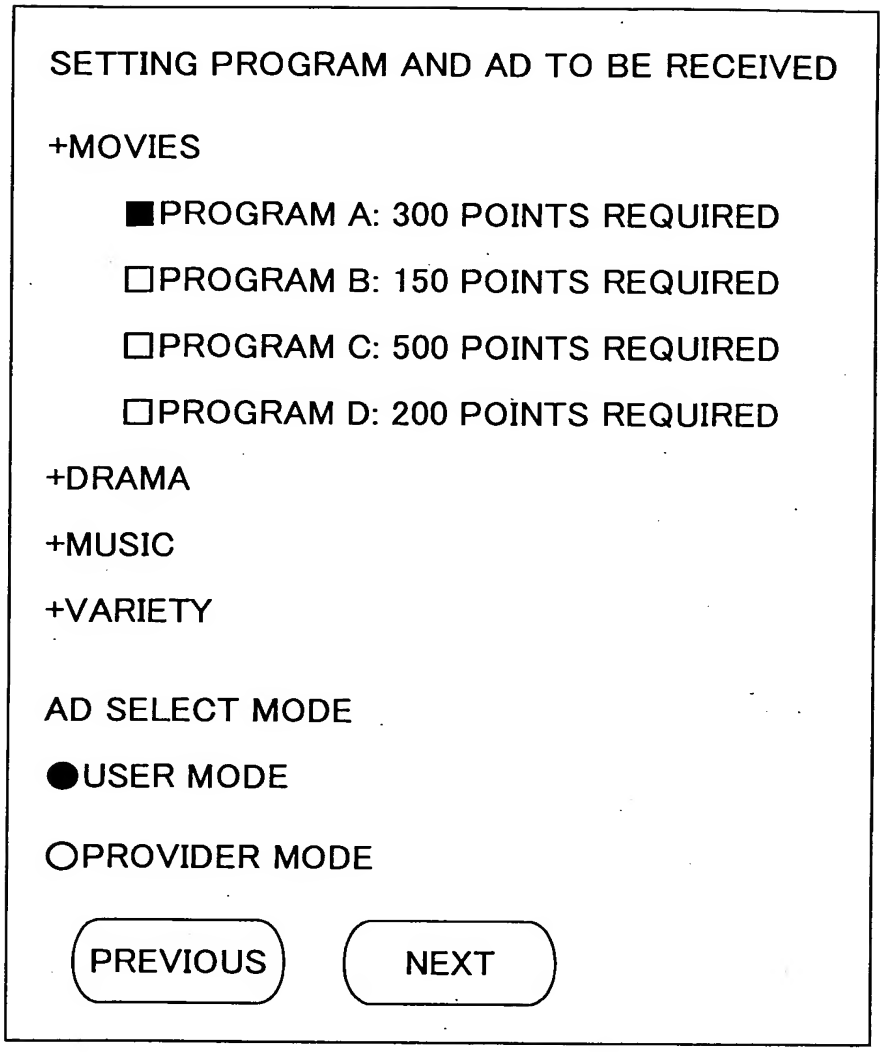

SETTING PROGRAM AND AD TO BE RECEIVED
+MOVIES
■PROGRAM A: 300 POINTS REQUIRED
□PROGRAM B: 150 POINTS REQUIRED
□PROGRAM C: 500 POINTS REQUIRED
□PROGRAM D: 200 POINTS REQUIRED
+DRAMA
+MUSIC
+VARIETY
AD SELECT MODE
●USER MODE
○PROVIDER MODE
PREVIOUS
NEXT

FIG.5

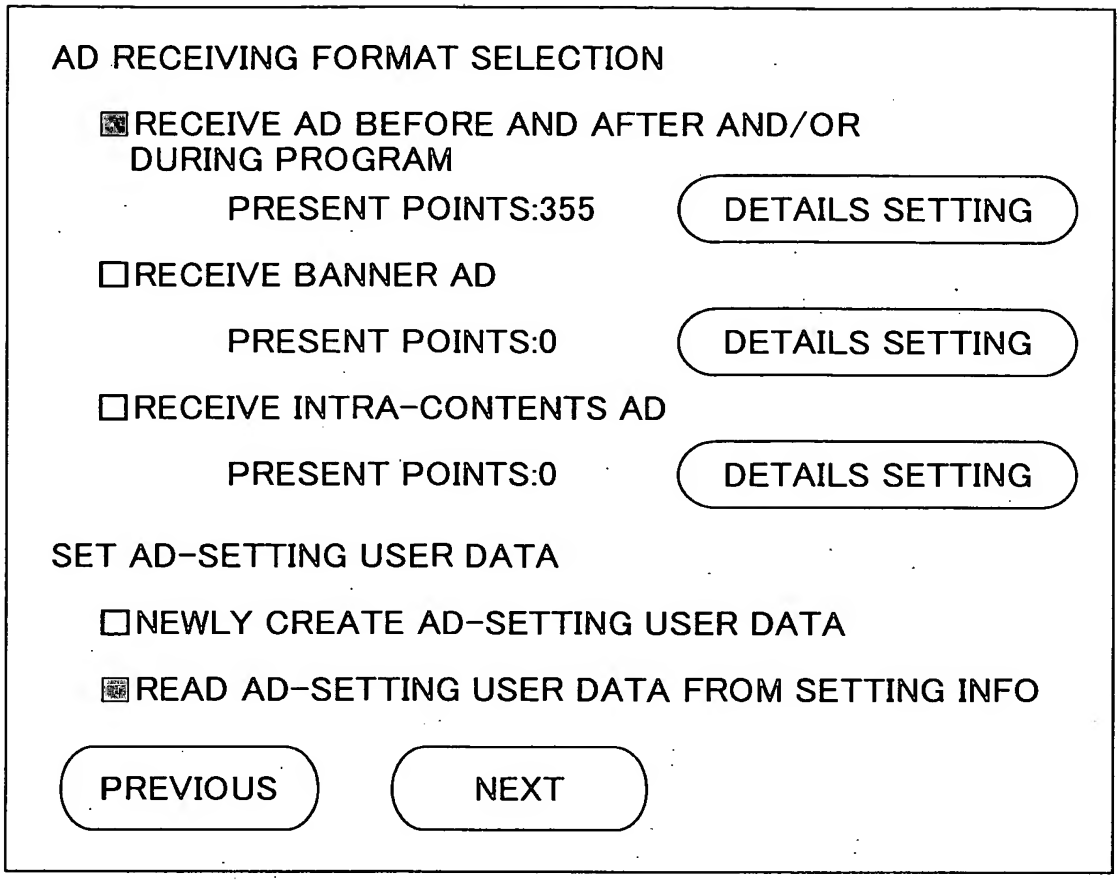

AD RECEIVING FORMAT SELECTION
RECEIVE AD BEFORE AND AFTER AND/OR DURING PROGRAM
PRESENT POINTS:355
DETAILS SETTING
RECEIVE BANNER AD
PRESENT POINTS:0
DETAILS SETTING
RECEIVE INTRA-CONTENTS AD
PRESENT POINTS:0
DETAILS SETTING
SET AD-SETTING USER DATA
NEWLY CREATE AD-SETTING USER DATA
READ AD-SETTING USER DATA FROM SETTING INFO
PREVIOUS
NEXT

FIG.6

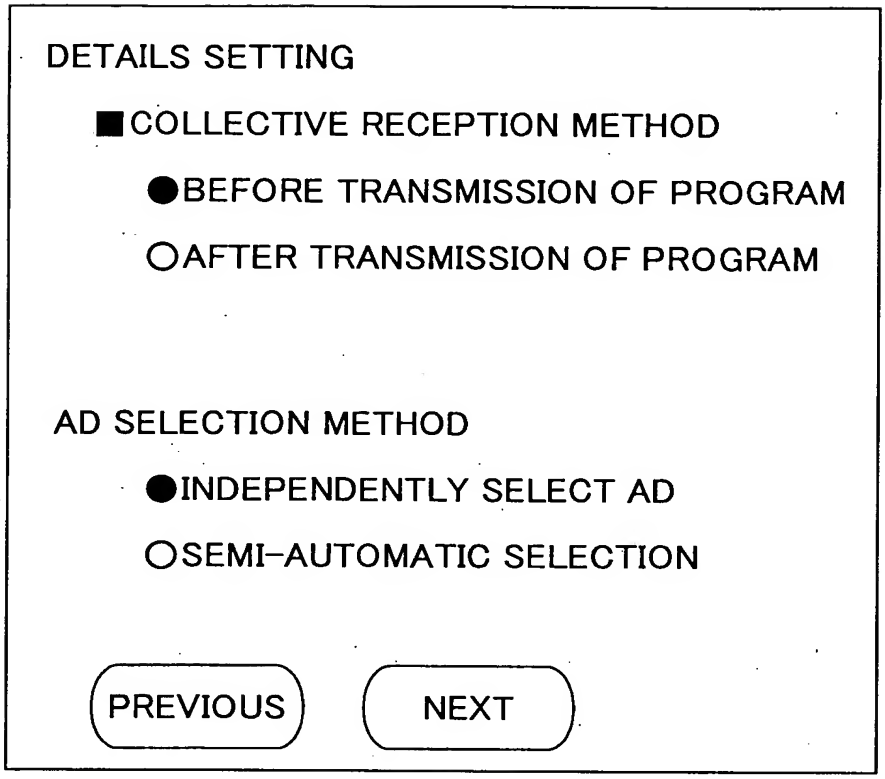

DETAILS SETTING
■COLLECTIVE RECEPTION METHOD
●BEFORE TRANSMISSION OF PROGRAM
○AFTER TRANSMISSION OF PROGRAM
AD SELECTION METHOD
●INDEPENDENTLY SELECT AD
○SEMI-AUTOMATIC SELECTION
PREVIOUS
NEXT

FIG.7

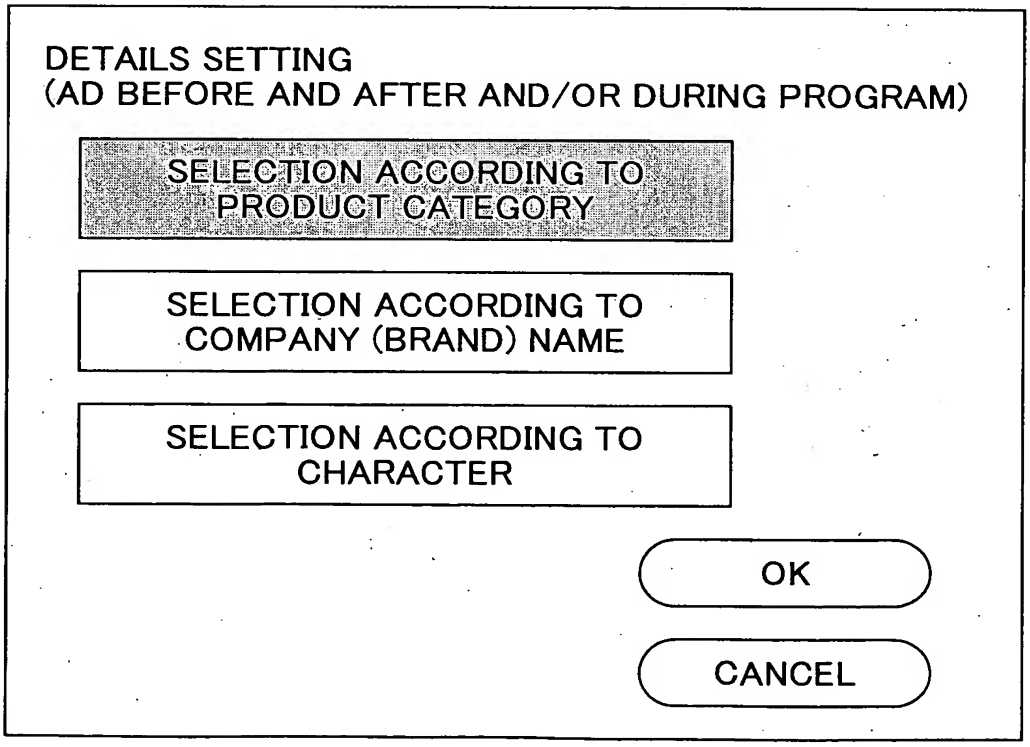

DETAILS SETTING
(AD BEFORE AND AFTER AND/OR DURING PROGRAM)
SELECTION ACCORDING TO PRODUCT CATEGORY
SELECTION ACCORDING TO COMPANY (BRAND) NAME
SELECTION ACCORDING TO CHARACTER
OK
CANCEL

FIG.8

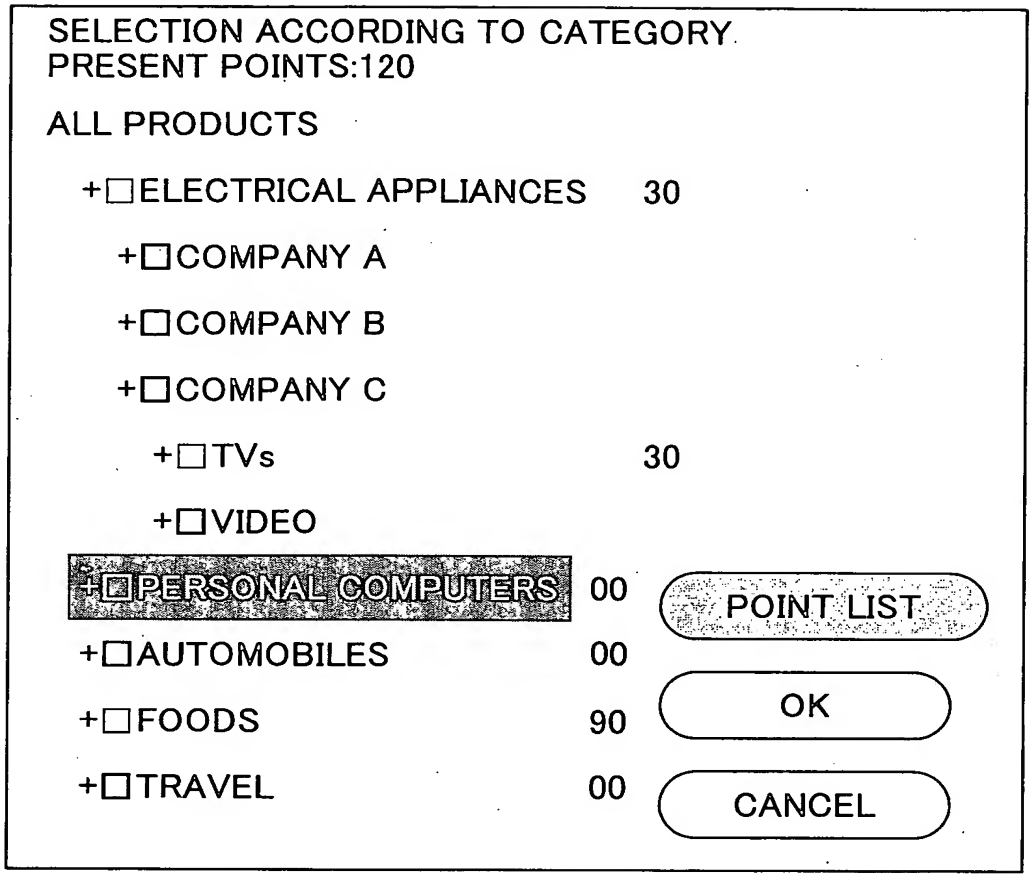

SELECTION ACCORDING TO CATEGORY
PRESENT POINTS:120
ALL PRODUCTS
+☐ELECTRICAL APPLIANCES 30
+☐COMPANY A
+☐COMPANY B
+☐COMPANY C
+☐TVs 30
+☐VIDEO
+☐PERSONAL COMPUTERS 00
+☐AUTOMOBILES 00
+☐FOODS 90
+☐TRAVEL 00
POINT LIST
OK
CANCEL

FIG.9

SELECTION	COMPANY (BRAND)NAME	PRODUCTS	POINTS	TIME (SEC)	AD TYPE	APPEARING CHARACTERS	THUMBNAIL
■	COMPANY F	—	15	5	IMAGE AD	—	
□	COMPANY F	—	15	15	NORMAL	A	
□	COMPANY F	PRODUCT A	15	15	NORMAL	B, C, D, ETC.	
■	COMPANY F	PRODUCT A	50	100	MINI-DRAMA AD	ACTORS TK & E	
□	COMPANY F	PRODUCT A	13	15	NORMAL	ACTORS TK & F	
□	COMPANY F	PRODUCT A	5	5	NORMAL	ACTORS TK & G	
■	COMPANY F	PRODUCT B	80	300	TV CATALOG	H & I	
□	COMPANY F	PRODUCT B	15	15	NORMAL	—	
□	COMPANY F	PRODUCT C	20	100	QUIZ-TYPE AD	A	
□	COMPANY S	PRODUCT D	15	15	NORMAL	A	
■	COMPANY S	PRODUCT D	80	30	DURING CAMPAIGN	—	

PREVIOUS PAGE

NEXT PAGE

OK

CANCEL

TOTAL P1 FOR THIS PAGE	255
TOTAL P2 FOR OTHER PAGES	120
POINTS P3 CARRIED OVER FROM BEFORE	10
TOTAL P4 (=P1+P2+P3)	355
POINTS P5 REQUIRED	300
POINTS (P4-P5) CARRIED OVER TO NEXT TIME	55

FIG.10

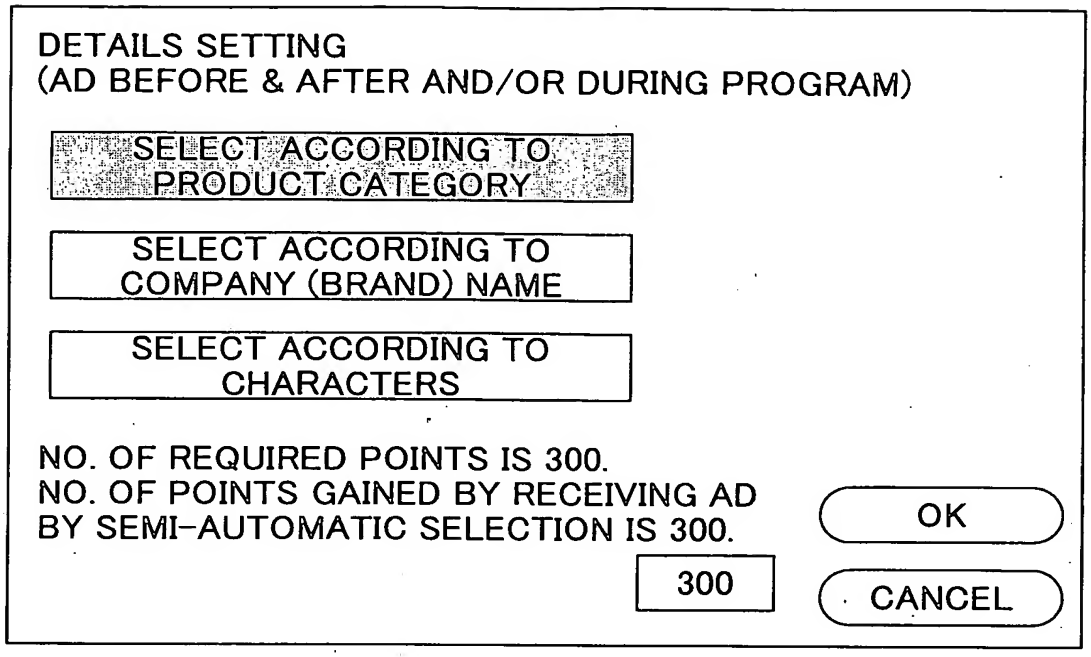

DETAILS SETTING
(AD BEFORE & AFTER AND/OR DURING PROGRAM)
SELECT ACCORDING TO PRODUCT CATEGORY
SELECT ACCORDING TO COMPANY (BRAND) NAME
SELECT ACCORDING TO CHARACTERS
NO. OF REQUIRED POINTS IS 300.
NO. OF POINTS GAINED BY RECEIVING AD BY SEMI-AUTOMATIC SELECTION IS 300.
300
OK
CANCEL

FIG.11

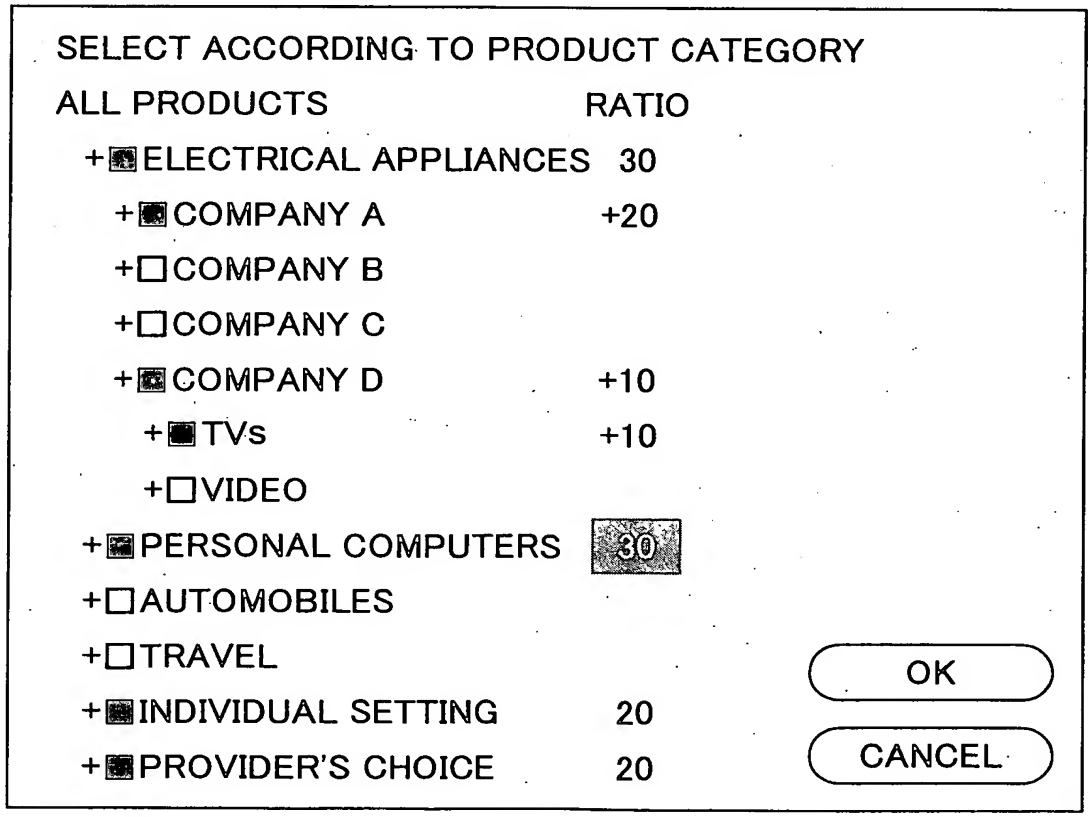

SELECT ACCORDING TO PRODUCT CATEGORY
ALL PRODUCTS
RATIO
+ELECTRICAL APPLIANCES 30
+COMPANY A +20
+COMPANY B
+COMPANY C
+COMPANY D +10
+TVs +10
+VIDEO
+PERSONAL COMPUTERS 30
+AUTOMOBILES
+TRAVEL
+INDIVIDUAL SETTING 20
+PROVIDER'S CHOICE 20
OK
CANCEL

FIG.12

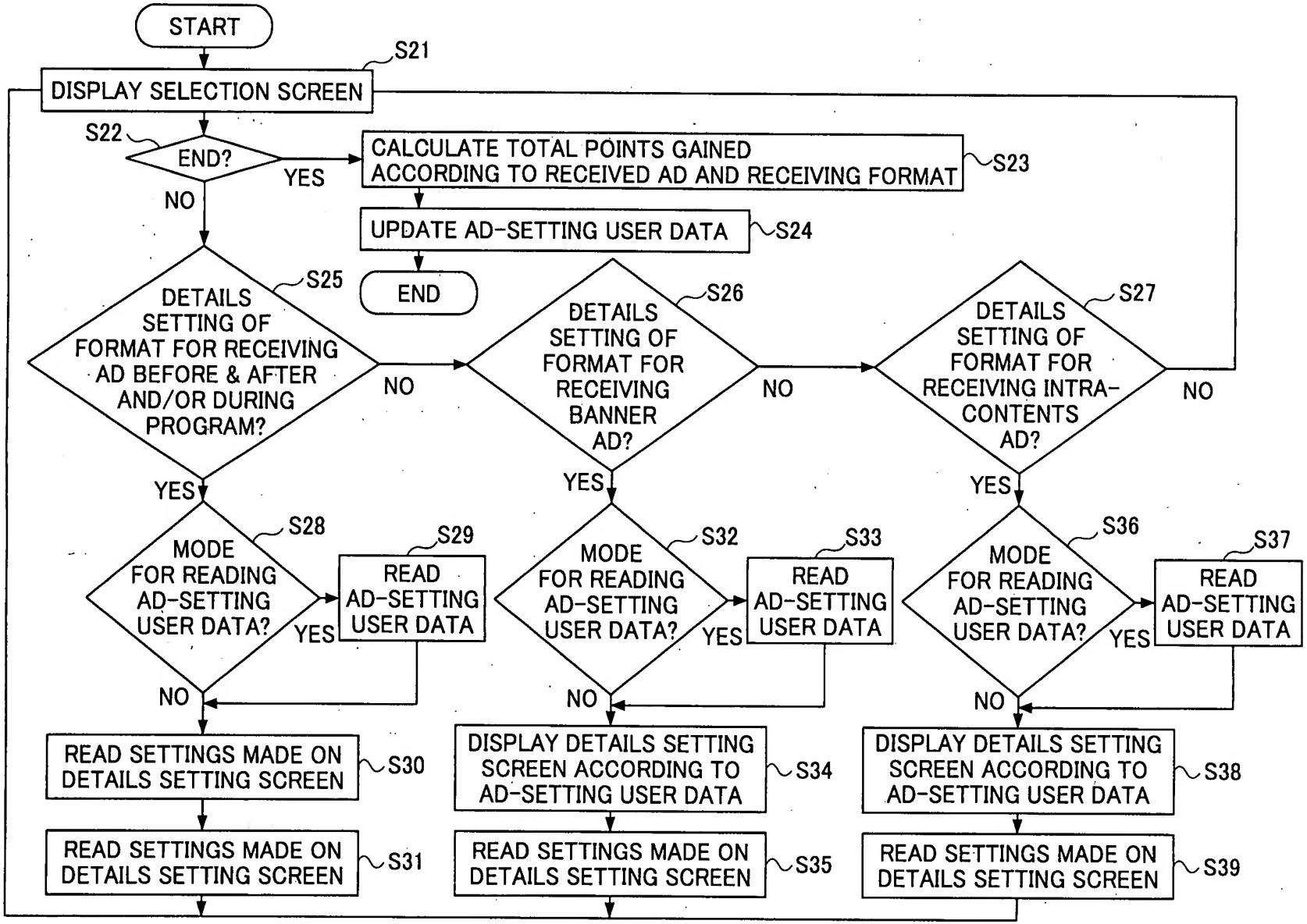

START
S21
DISPLAY SELECTION SCREEN
S22
END?
YES
NO
CALCULATE TOTAL POINTS GAINED ACCORDING TO RECEIVED AD AND RECEIVING FORMAT
S23
UPDATE AD-SETTING USER DATA
S24
END
S25
DETAILS SETTING OF FORMAT FOR RECEIVING AD BEFORE & AFTER AND/OR DURING PROGRAM?
NO
S26
DETAILS SETTING OF FORMAT FOR RECEIVING BANNER AD?
NO
S27
DETAILS SETTING OF FORMAT FOR RECEIVING INTRA-CONTENTS AD?
NO
YES
YES
YES
S28
MODE FOR READING AD-SETTING USER DATA?
YES
S29
READ AD-SETTING USER DATA
S32
MODE FOR READING AD-SETTING USER DATA?
YES
S33
READ AD-SETTING USER DATA
S36
MODE FOR READING AD-SETTING USER DATA?
YES
S37
READ AD-SETTING USER DATA
NO
NO
NO
READ SETTINGS MADE ON DETAILS SETTING SCREEN
S30
READ SETTINGS MADE ON DETAILS SETTING SCREEN
S31
DISPLAY DETAILS SETTING SCREEN ACCORDING TO AD-SETTING USER DATA
S34
READ SETTINGS MADE ON DETAILS SETTING SCREEN
S35
DISPLAY DETAILS SETTING SCREEN ACCORDING TO AD-SETTING USER DATA
S38
READ SETTINGS MADE ON DETAILS SETTING SCREEN
S39

FIG.13

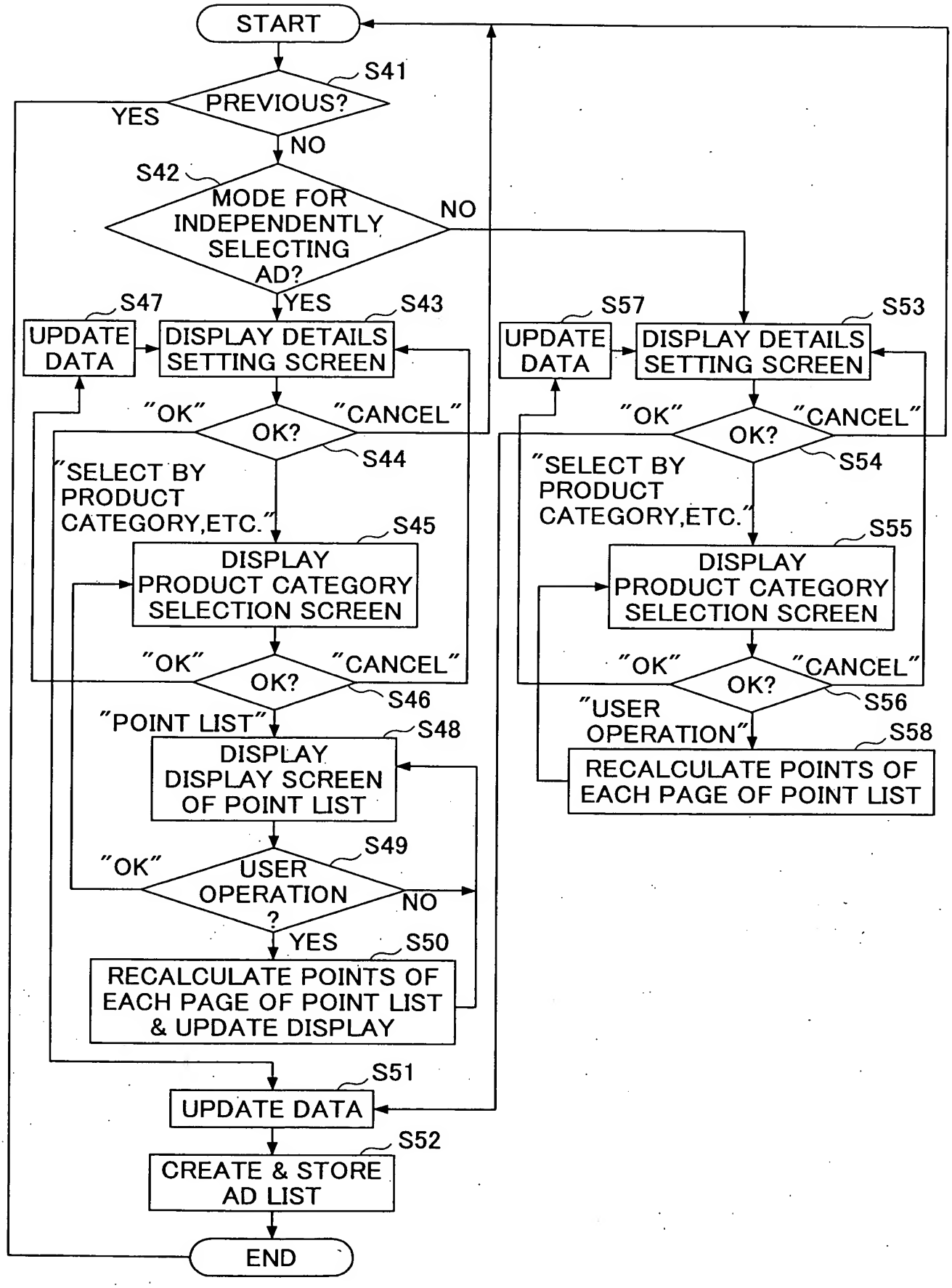

START
S41
PREVIOUS?
YES
NO
S42
MODE FOR INDEPENDENTLY SELECTING AD?
NO
YES
S47
UPDATE DATA
S43
DISPLAY DETAILS SETTING SCREEN
"OK"
OK?
"CANCEL"
S44
"SELECT BY PRODUCT CATEGORY,ETC."
S45
DISPLAY PRODUCT CATEGORY SELECTION SCREEN
"OK"
OK?
"CANCEL"
S46
"POINT LIST"
S48
DISPLAY DISPLAY SCREEN OF POINT LIST
S49
"OK"
USER OPERATION ?
NO
YES
S50
RECALCULATE POINTS OF EACH PAGE OF POINT LIST & UPDATE DISPLAY
S51
UPDATE DATA
S52
CREATE & STORE AD LIST
END
S57
UPDATE DATA
S53
DISPLAY DETAILS SETTING SCREEN
"OK"
OK?
"CANCEL"
S54
"SELECT BY PRODUCT CATEGORY,ETC."
S55
DISPLAY PRODUCT CATEGORY SELECTION SCREEN
"OK"
OK?
"CANCEL"
S56
"USER OPERATION"
S58
RECALCULATE POINTS OF EACH PAGE OF POINT LIST

FIG.14

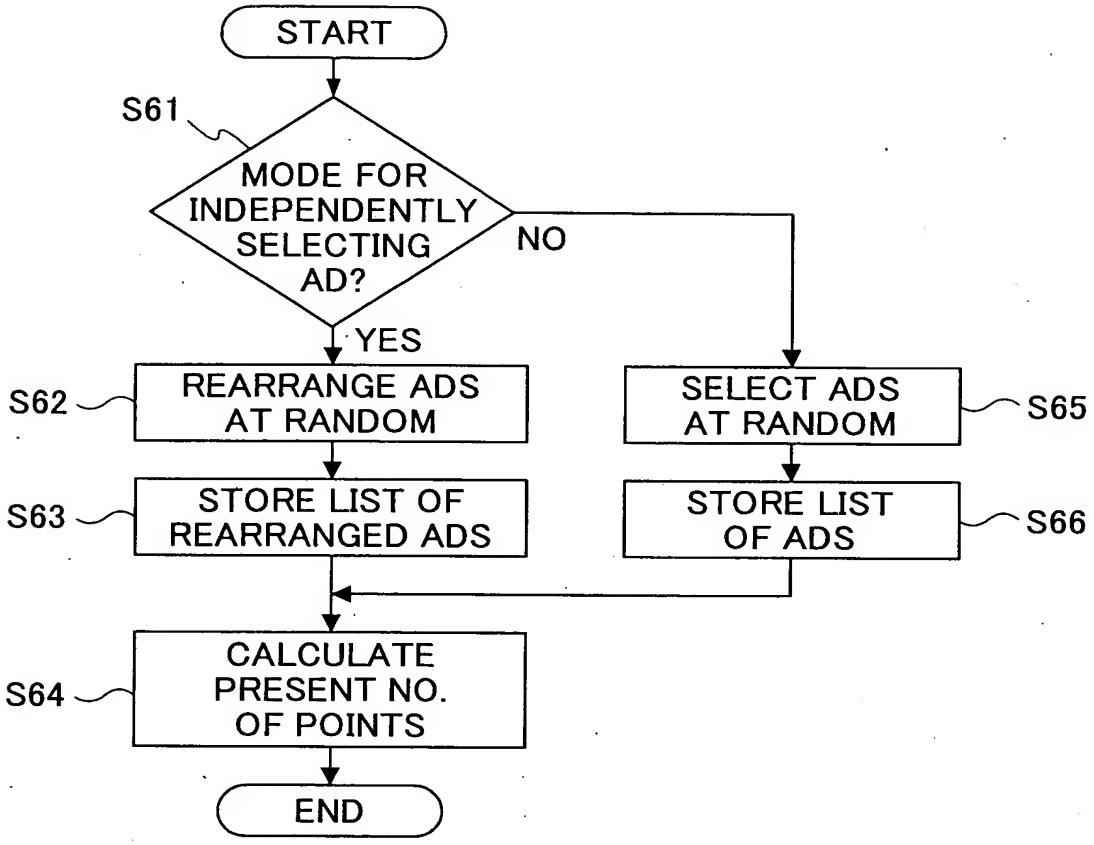

START
S61
MODE FOR INDEPENDENTLY SELECTING AD?
NO
YES
S62
REARRANGE ADS AT RANDOM
S63
STORE LIST OF REARRANGED ADS
S64
CALCULATE PRESENT NO. OF POINTS
END
SELECT ADS AT RANDOM
S65
STORE LIST OF ADS
S66

FIG.15

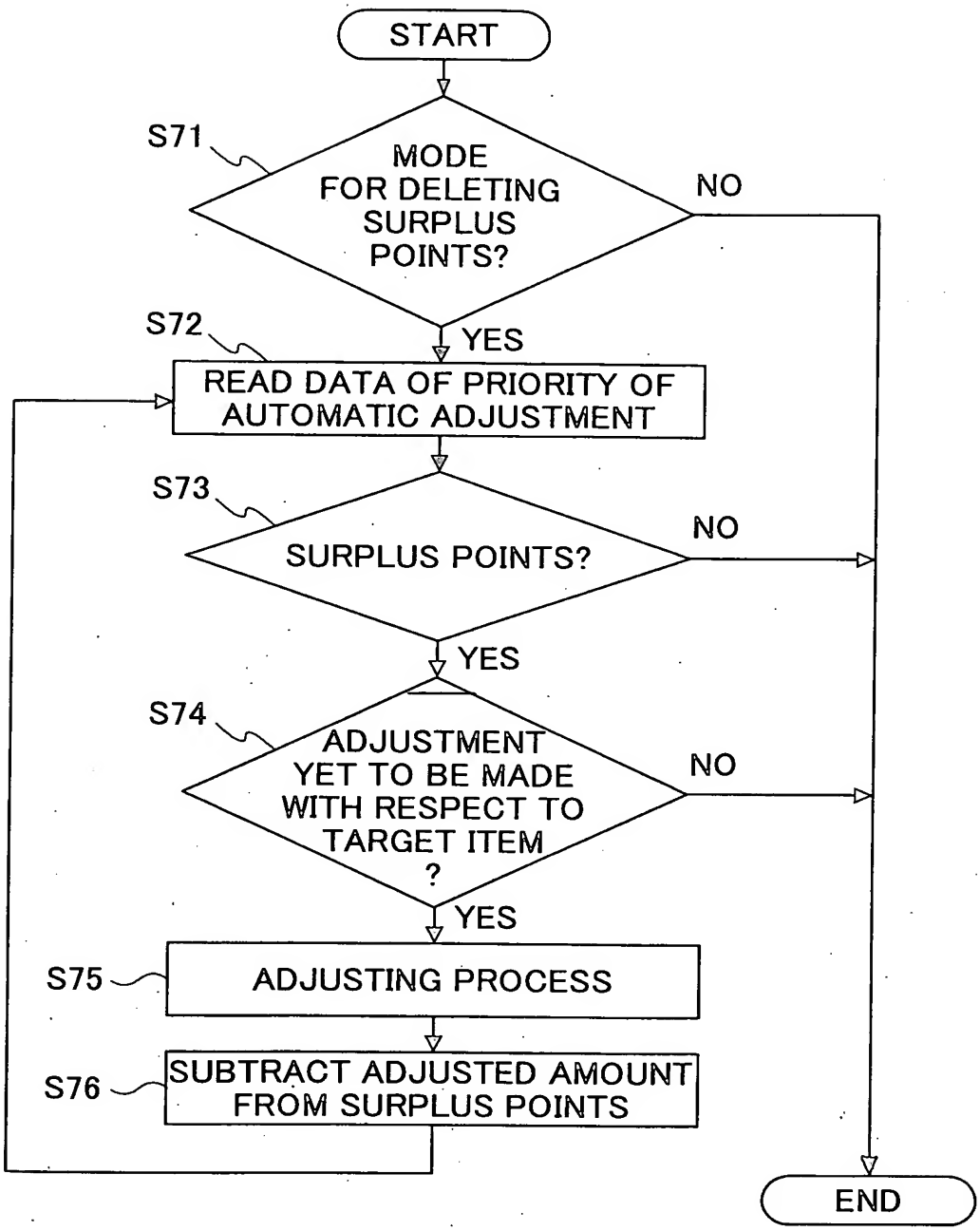

START
S71
MODE FOR DELETING SURPLUS POINTS?
NO
YES
S72
READ DATA OF PRIORITY OF AUTOMATIC ADJUSTMENT
S73
SURPLUS POINTS?
NO
YES
S74
ADJUSTMENT YET TO BE MADE WITH RESPECT TO TARGET ITEM ?
NO
YES
S75
ADJUSTING PROCESS
S76
SUBTRACT ADJUSTED AMOUNT FROM SURPLUS POINTS
END

FIG.16

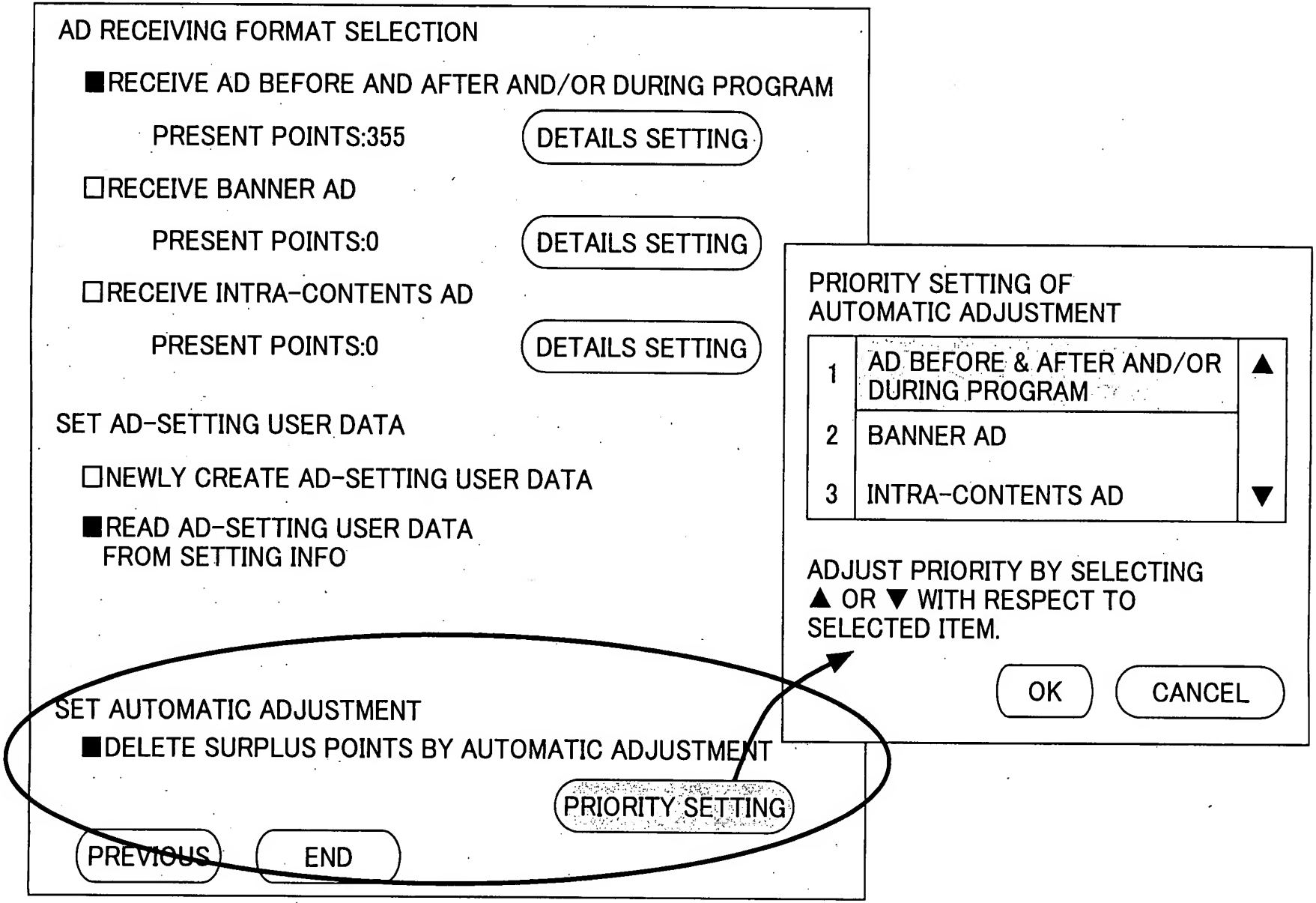

AD RECEIVING FORMAT SELECTION
■RECEIVE AD BEFORE AND AFTER AND/OR DURING PROGRAM
PRESENT POINTS:355
DETAILS SETTING
□RECEIVE BANNER AD
PRESENT POINTS:0
DETAILS SETTING
□RECEIVE INTRA-CONTENTS AD
PRESENT POINTS:0
DETAILS SETTING
SET AD-SETTING USER DATA
□NEWLY CREATE AD-SETTING USER DATA
■READ AD-SETTING USER DATA FROM SETTING INFO
SET AUTOMATIC ADJUSTMENT
■DELETE SURPLUS POINTS BY AUTOMATIC ADJUSTMENT
PRIORITY SETTING
PREVIOUS
END
PRIORITY SETTING OF AUTOMATIC ADJUSTMENT
1 AD BEFORE & AFTER AND/OR DURING PROGRAM
2 BANNER AD
3 INTRA-CONTENTS AD
ADJUST PRIORITY BY SELECTING ▲ OR ▼ WITH RESPECT TO SELECTED ITEM.
OK
CANCEL

FIG.17

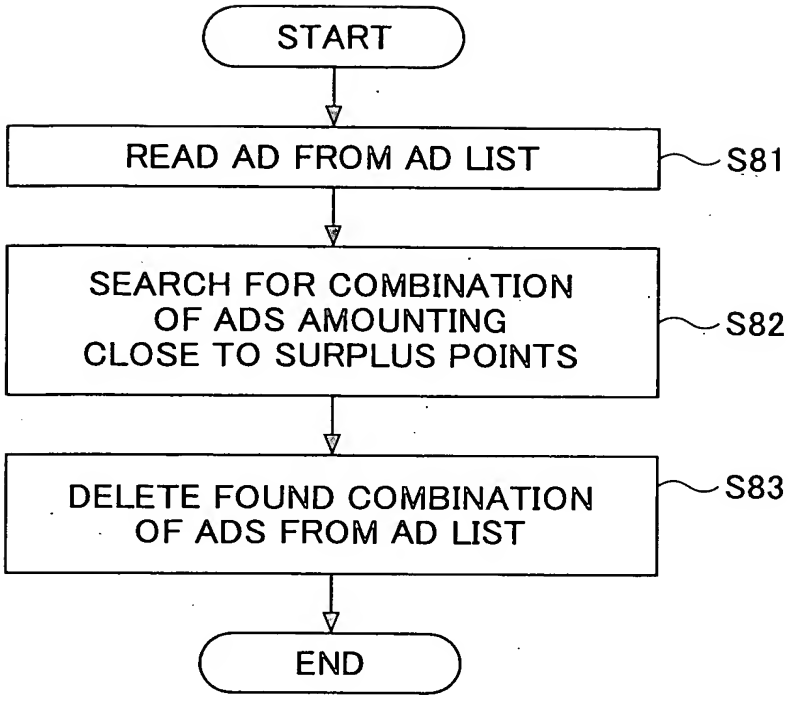

START
READ AD FROM AD LIST
S81
SEARCH FOR COMBINATION OF ADS AMOUNTING CLOSE TO SURPLUS POINTS
S82
DELETE FOUND COMBINATION OF ADS FROM AD LIST
S83
END

FIG.18

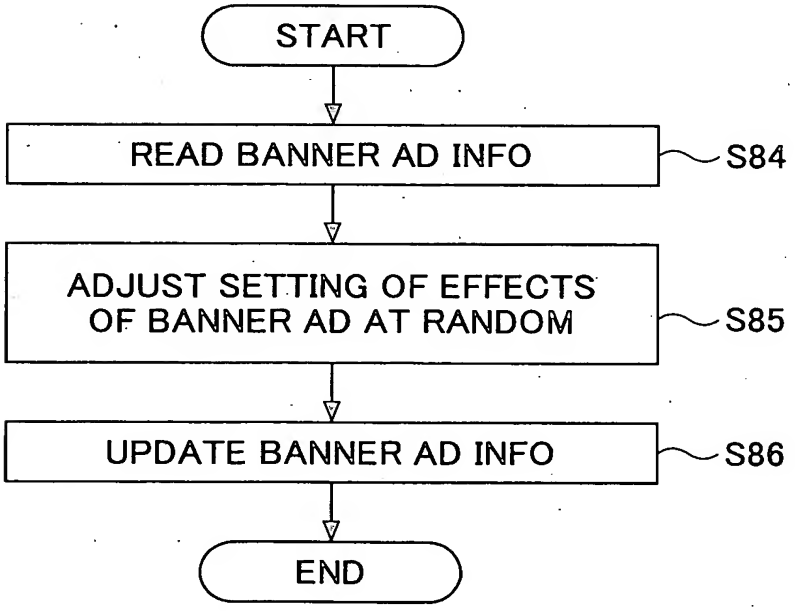

START
READ BANNER AD INFO
S84
ADJUST SETTING OF EFFECTS OF BANNER AD AT RANDOM
S85
UPDATE BANNER AD INFO
S86
END

FIG.19

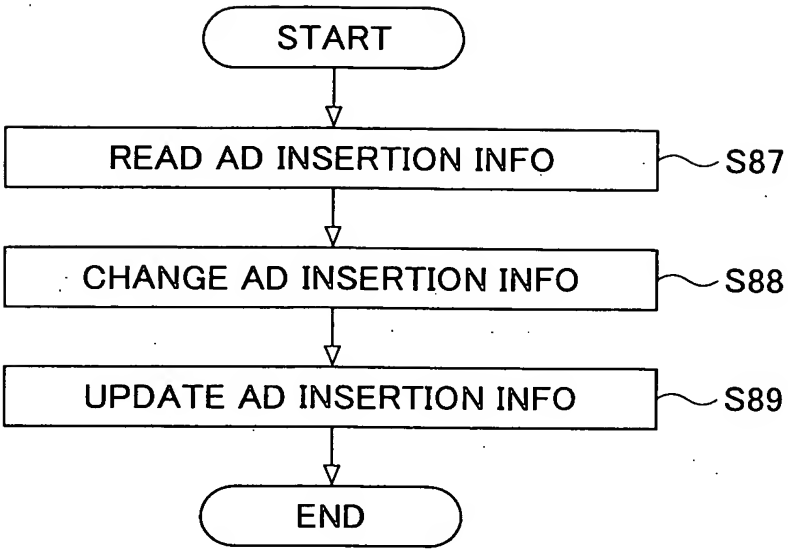

START
READ AD INSERTION INFO
S87
CHANGE AD INSERTION INFO
S88
UPDATE AD INSERTION INFO
S89
END

FIG.20

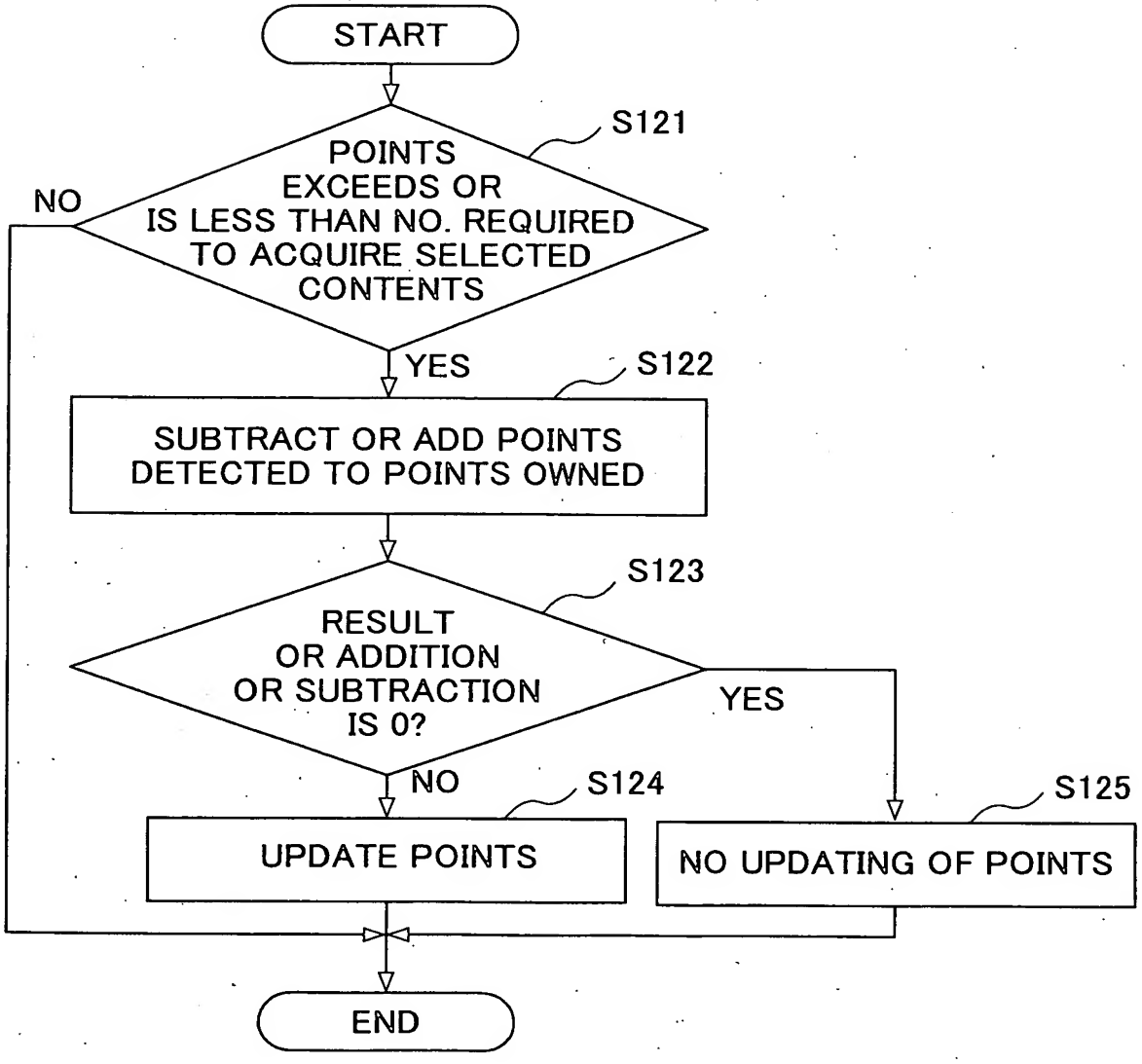

START
S121
POINTS EXCEEDS OR IS LESS THAN NO. REQUIRED TO ACQUIRE SELECTED CONTENTS
NO
YES
S122
SUBTRACT OR ADD POINTS DETECTED TO POINTS OWNED
S123
RESULT OR ADDITION OR SUBTRACTION IS 0?
YES
NO
S124
UPDATE POINTS
S125
NO UPDATING OF POINTS
END

FIG.21

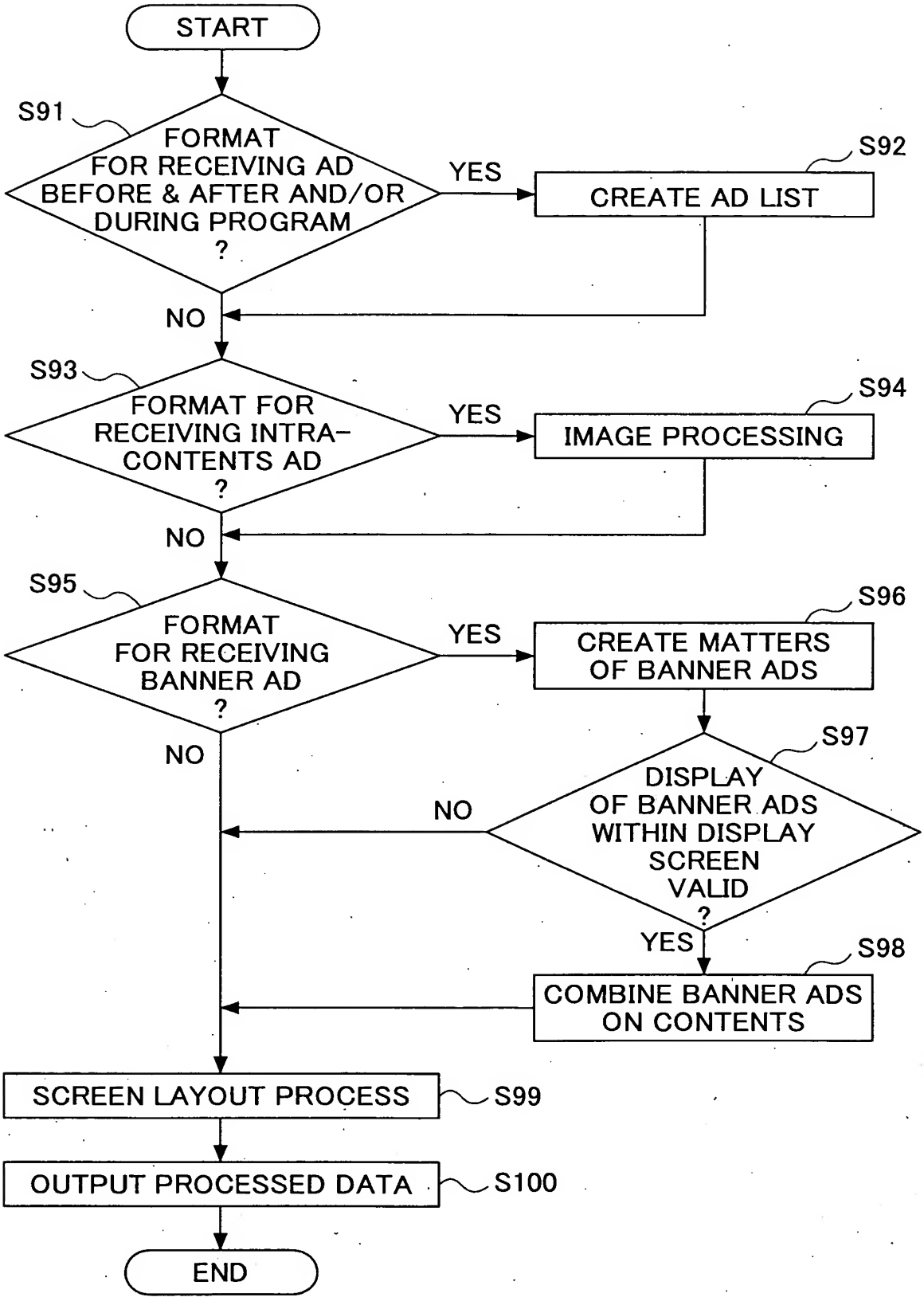

START
S91
FORMAT FOR RECEIVING AD BEFORE & AFTER AND/OR DURING PROGRAM ?
YES
S92
CREATE AD LIST
NO
S93
FORMAT FOR RECEIVING INTRA-CONTENTS AD ?
YES
S94
IMAGE PROCESSING
NO
S95
FORMAT FOR RECEIVING BANNER AD ?
YES
S96
CREATE MATTERS OF BANNER ADS
NO
S97
DISPLAY OF BANNER ADS WITHIN DISPLAY SCREEN VALID ?
NO
YES
S98
COMBINE BANNER ADS ON CONTENTS
SCREEN LAYOUT PROCESS
S99
OUTPUT PROCESSED DATA
S100
END

FIG.22

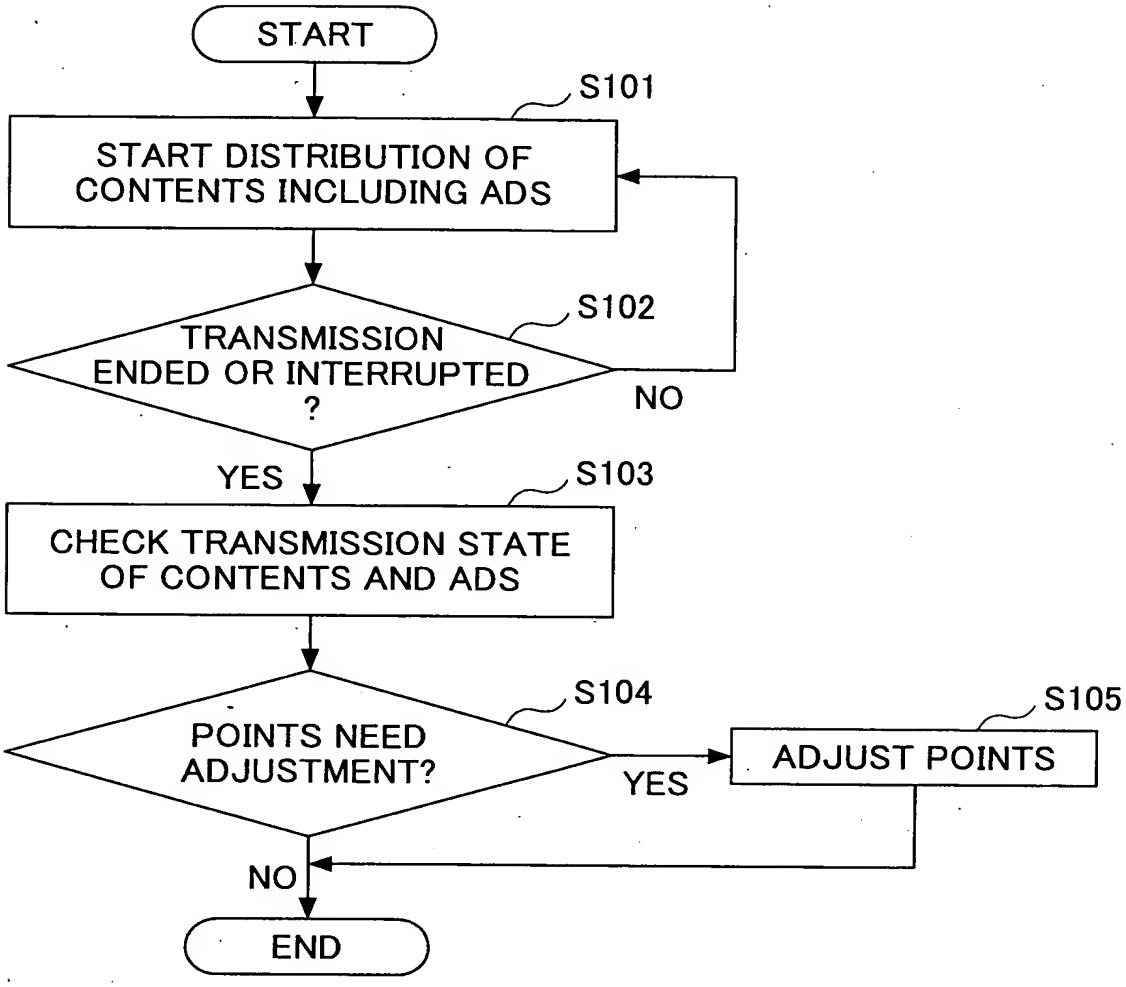

START
S101
START DISTRIBUTION OF CONTENTS INCLUDING ADS
S102
TRANSMISSION ENDED OR INTERRUPTED ?
NO
YES
S103
CHECK TRANSMISSION STATE OF CONTENTS AND ADS
S104
POINTS NEED ADJUSTMENT?
YES
S105
ADJUST POINTS
NO
END

FIG.23

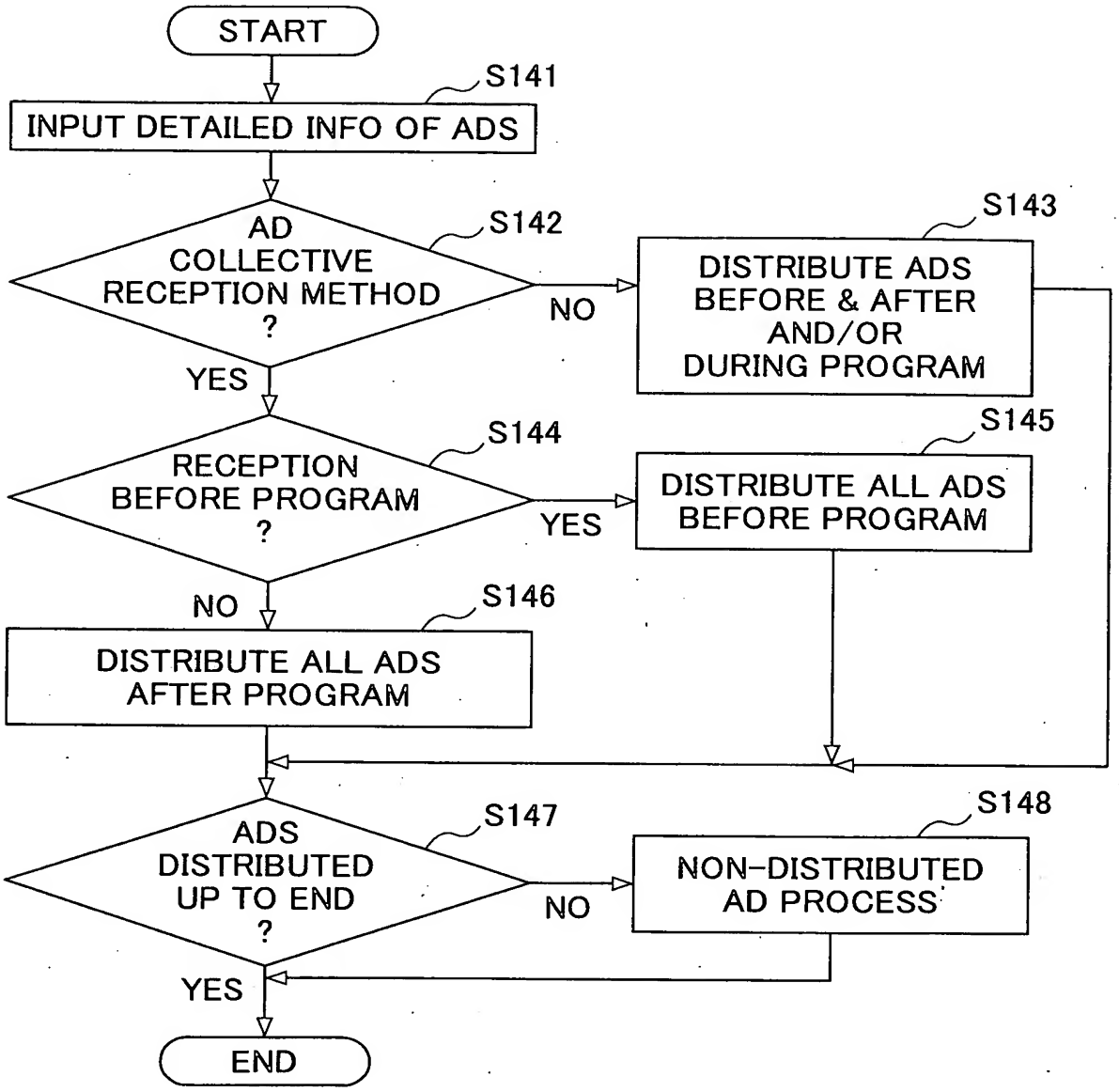

START
S141
INPUT DETAILED INFO OF ADS
AD COLLECTIVE RECEPTION METHOD ?
S142
NO
S143
DISTRIBUTE ADS BEFORE & AFTER AND/OR DURING PROGRAM
YES
RECEPTION BEFORE PROGRAM ?
S144
YES
S145
DISTRIBUTE ALL ADS BEFORE PROGRAM
NO
S146
DISTRIBUTE ALL ADS AFTER PROGRAM
ADS DISTRIBUTED UP TO END ?
S147
NO
S148
NON-DISTRIBUTED AD PROCESS
YES
END

FIG.24

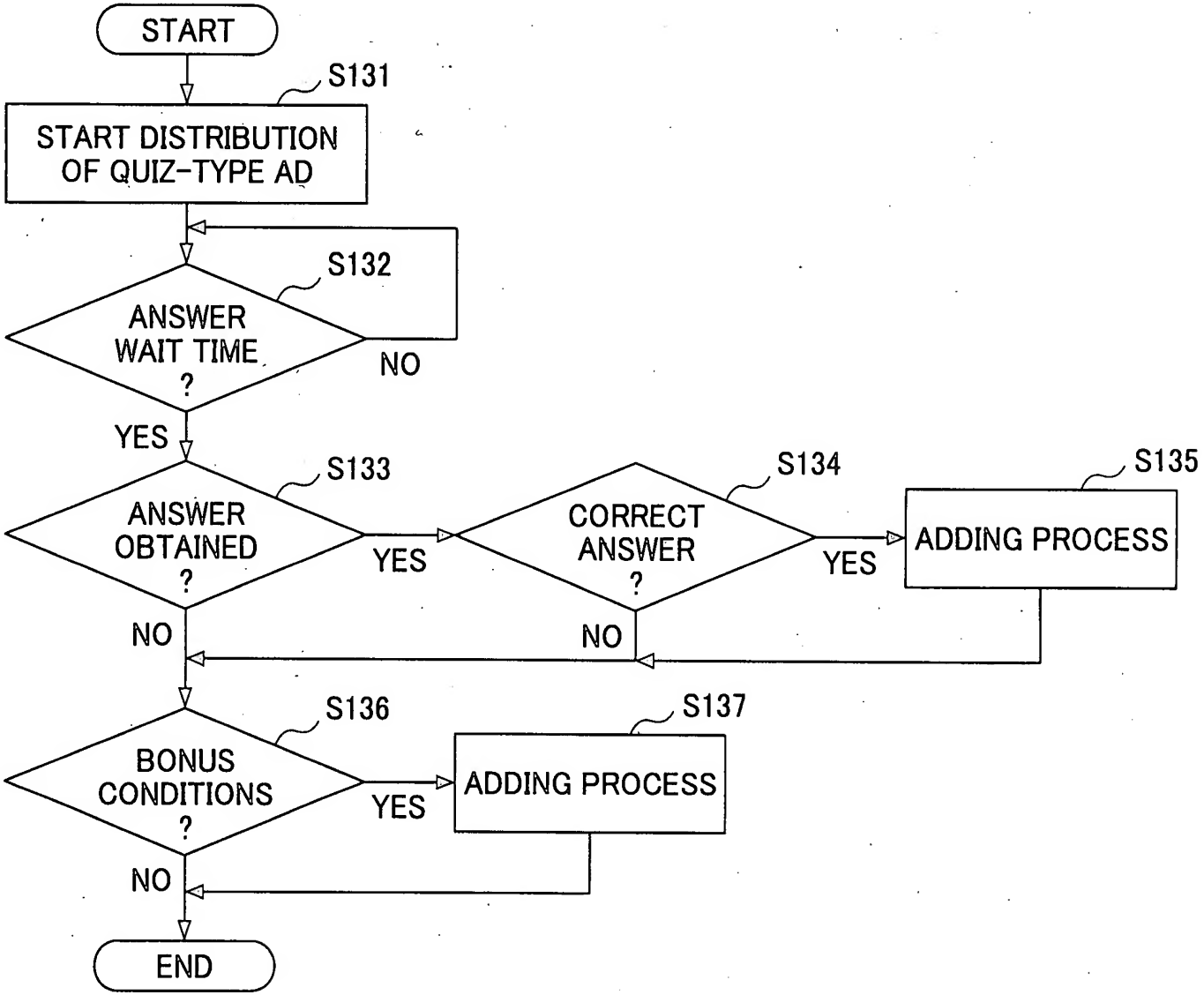
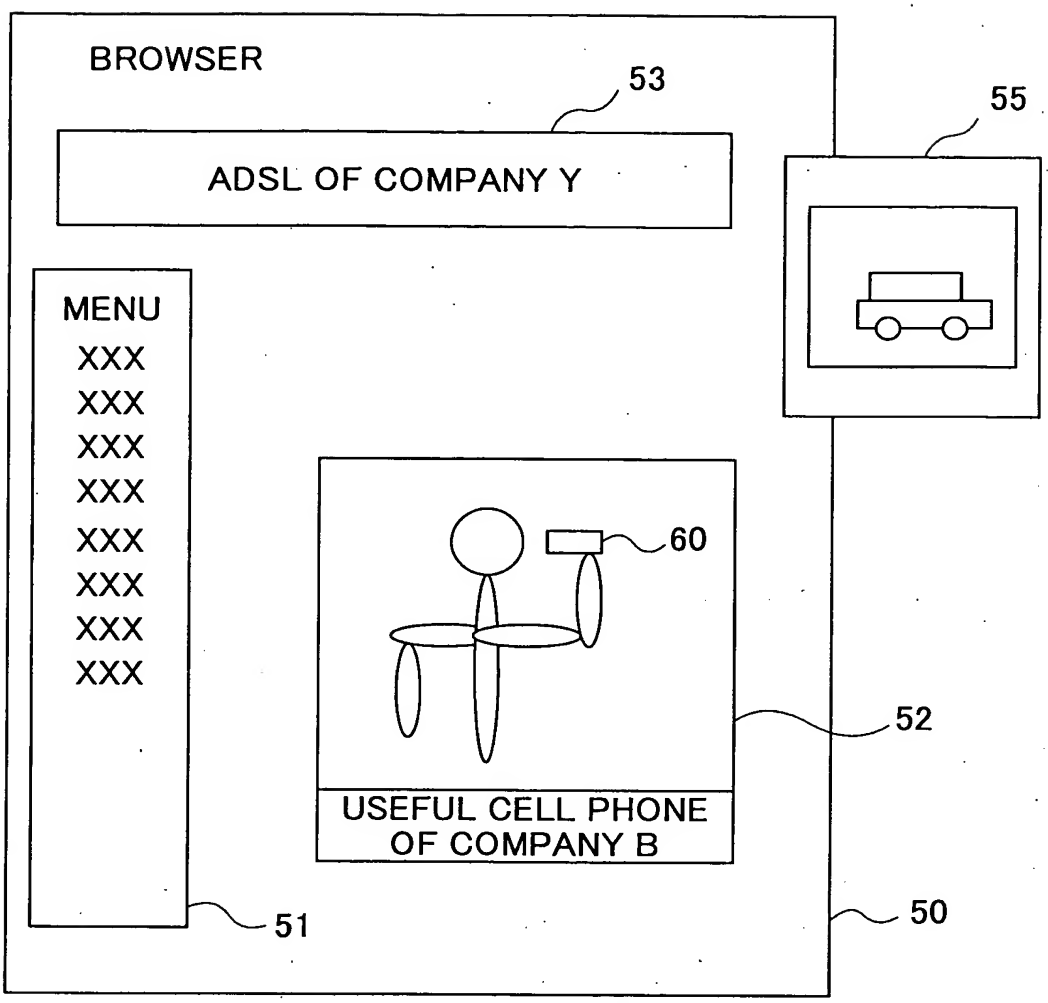

START
S131
START DISTRIBUTION OF QUIZ-TYPE AD
S132
ANSWER WAIT TIME ?
NO
YES
S133
ANSWER OBTAINED ?
YES
S134
CORRECT ANSWER ?
YES
S135
ADDING PROCESS
NO
NO
S136
BONUS CONDITIONS ?
YES
S137
ADDING PROCESS
NO
END

FIG.25


BROWSER
53
55
ADSL OF COMPANY Y
MENU
XXX
XXX
XXX
XXX
XXX
XXX
XXX
XXX
60
52
USEFUL CELL PHONE
OF COMPANY B
51
50